

312428



# Part Submission Warrant

Part Name	<b>Speed Gear 4</b>	Customer Part Number	<b>250.1.3876.35</b>
Shown on Drawing No.	<b>250.1.3876.35</b>	Organization Part #	
Engineering Change Level	<b>d C007260_MIP_1</b>	Dated	<b>10-gen-17</b>
Additional Engineering Changes		Dated	
Safety and/or Government Regulation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Purchase Order No.	
Checking Aid No.		Weight (kg)	<b>0.8880</b>
Checking Aid Engineering Change Level		Dated	

### ORGANIZATION MANUFACTURING INFORMATION

### CUSTOMER SUBMITTAL INFORMATION

#### GETRAG MODUGNO

Organization Name & Supplier/Vendor Code

**VIA DEI CICLAMINI N°4**

Street Address

<b>MODUGNO BARI</b>	<b>70026</b>	<b>ITALY</b>
City	Region	Postal Code
		Country

Customer Name/Division

Buyer/Buyer Code

**DCT250**

Application

#### MATERIALS REPORTING

Has customer-required Substances of Concern information been reported?  Yes  No  n/a

Submitted by IMDS or other customer format:

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Are polymeric parts identified with appropriate ISO marking codes?  Yes  No  n/a

#### REASON FOR SUBMISSION (Check at least one)

- |   |  |
|---|--|
| <input type="checkbox"/> Initial Submission   | <input type="checkbox"/> Change to Optional Construction or Material |
| <input checked="" type="checkbox"/> Engineering Change(s)                             | <input type="checkbox"/> Supplier or Material Source Change          |
| <input type="checkbox"/> Tooling: Transfer, Replacement, Refurbishment, or additional | <input type="checkbox"/> Change in Part Processing                   |
| <input type="checkbox"/> Correction of Discrepancy                                    | <input type="checkbox"/> Parts Produced at Additional Location       |
| <input type="checkbox"/> Tooling Inactive > than 1 year                               | <input type="checkbox"/> Other - please specify below                |

#### REQUESTED SUBMISSION LEVEL (Check one)

- Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
- Level 2 - Warrant with product samples and limited supporting data submitted to customer.
- Level 3 - Warrant with product samples and complete supporting data submitted to customer.
- Level 4 - Warrant and other requirements as defined by customer.
- Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location.

#### SUBMISSION RESULTS

The results for  dimensional measurements  material and functional tests  appearance criteria  statistical process package

These results meet all drawing and specification requirements:  Yes  NO (If "NO" - Explanation Required)

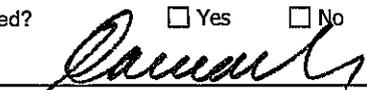
Mold / Cavity / Production Process \_\_\_\_\_

#### DECLARATION

I hereby affirm that the samples represented by this warrant are representative of our parts which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of 2000 / 24 hours. I also certify that documented evidence of such compliance is on file and available for review. I have noted any deviations from this declaration below.

EXPLANATION / COMMENTS: **Drawing correction with standard Tip diameter tolerance used for topping machining (increased)**

Is each Customer Tool properly tagged and numbered?  Yes  No  n/a

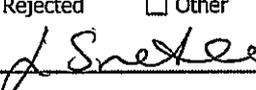
Organization Authorized Signature  Date **24/01/2017**

Print Name **Camarda Ettore** Phone No. **tel 390805858220** Fax No. \_\_\_\_\_

Title **Area 1 Manager** E-mail **ettore.camarda@magna.com**

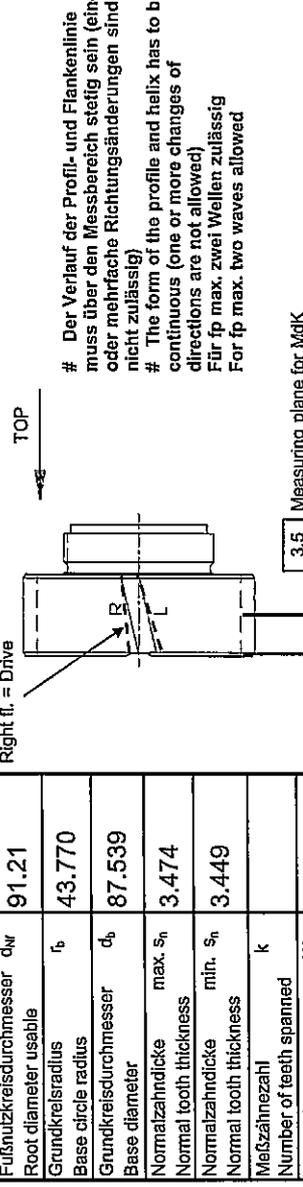
FOR CUSTOMER USE ONLY (IF APPLICABLE)

Part Warrant Disposition:  Approved  Rejected  Other

Customer Signature  Date **24.01.17**

Print Name \_\_\_\_\_ Customer Tracking Number (optional) \_\_\_\_\_

STIRNAD GEAR		Toleranzen der Verzahnung (DIN 3961 vom Aug. 1978) valid for values at individual tooth	
Zähnezahl Number of teeth	z	linke Fl. left flank	rechte Fl. right flank
Modul Normal module	$m_n$	# 0.004	0.014
Eingriffswinkel Normal pressure angle	$\alpha_n$		0.014
Schrägungswinkel Helix angle	$\beta$		0.018
Stellungsrichtung Hand of helix	LEFT		
Profilverschleissfaktor Addendum modification coeff.	x	0.000 $\pm 0.007$	0.000 $\pm 0.007$
Teilkreisdurchmesser Pitch diameter	d	+ 0.010 $\pm 0.013$	- 0.015 $\pm 0.013$
Kopfkreisdurchmesser Outside diameter	$d_a$		
Kopfnutkreisd. theo. max. $d_{ka}$ Tip diam. usable theo.		# 0.004	0.040
Kopfnutkreisd. theo. min. $d_{ka}$ Tip diam. usable theo.			0.016
Fußkreisdurchmesser Root diameter	$d_f$		17.32
Fußnutkreisdurchmesser Root diameter usable	$d_{fr}$		
Grundkreisradius Base circle radius	$r_b$		
Grundkreisdurchmesser Base diameter	$d_b$		
Normalzahnstärke Normal tooth thickness	max. $s_n$		
Normalzahnstärke Normal tooth thickness	min. $s_n$		
Meßzahnanzahl Number of teeth spanned	k		
Zahnweite Base tangent length	max. $W_k$		
Zahnweite Base tangent length	min. $W_k$		
Meßkugeldurchmesser Ball diameter	$D_M$		
Diam. Zweikugelmaß Measurement o. balls	max. $M_{2k}$		
Diam. Zweikugelmaß Measurement o. balls	min. $M_{2k}$		
Verdrehfankenspiel Circumferential backlash	theo. $0.067$		
	0.162		



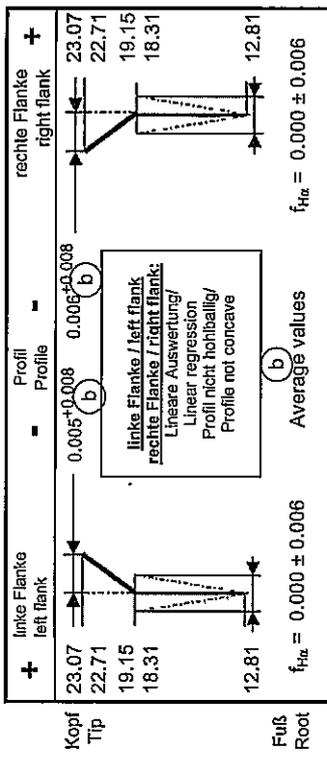
# Der Verlauf der Profil- und Flankenlinie muss über den Messbereich stetig sein (ein- oder mehrfache Richtungsänderungen sind nicht zulässig)  
 # The form of the profile and helix has to be continuous (one or more changes of directions are not allowed)  
 Für  $f_p$  max. zwei Wellen zulässig  
 For  $f_p$  max. two waves allowed

Handdurchmesser =  $90.30 \pm 0.30 \approx 11.08$   
 honing diameter

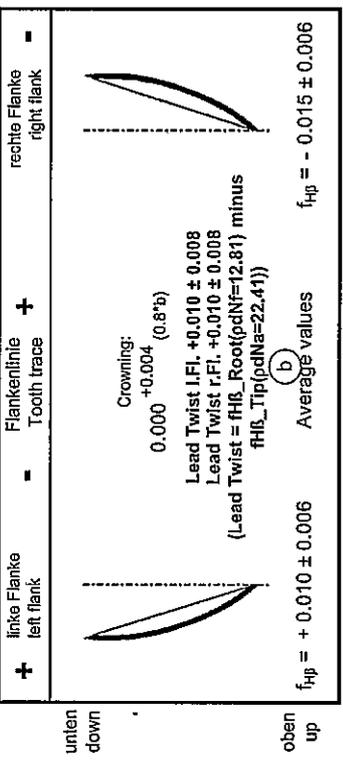
außenverzahnt external		Toleranzen der Verzahnung (DIN 3961 vom Aug. 1978) valid for values at individual tooth	
Zähnezahl Number of teeth	z	linke Fl. left flank	rechte Fl. right flank
Modul Normal module	$m_n$	# 0.004	0.014
Eingriffswinkel Normal pressure angle	$\alpha_n$		0.014
Schrägungswinkel Helix angle	$\beta$		0.018
Stellungsrichtung Hand of helix	LEFT		
Profilverschleissfaktor Addendum modification coeff.	x	0.000 $\pm 0.007$	0.000 $\pm 0.007$
Teilkreisdurchmesser Pitch diameter	d	+ 0.010 $\pm 0.013$	- 0.015 $\pm 0.013$
Kopfkreisdurchmesser Outside diameter	$d_a$		
Kopfnutkreisd. theo. max. $d_{ka}$ Tip diam. usable theo.		# 0.004	0.040
Kopfnutkreisd. theo. min. $d_{ka}$ Tip diam. usable theo.			0.016
Fußkreisdurchmesser Root diameter	$d_f$		17.32
Fußnutkreisdurchmesser Root diameter usable	$d_{fr}$		
Grundkreisradius Base circle radius	$r_b$		
Grundkreisdurchmesser Base diameter	$d_b$		
Normalzahnstärke Normal tooth thickness	max. $s_n$		
Normalzahnstärke Normal tooth thickness	min. $s_n$		
Meßzahnanzahl Number of teeth spanned	k		
Zahnweite Base tangent length	max. $W_k$		
Zahnweite Base tangent length	min. $W_k$		
Meßkugeldurchmesser Ball diameter	$D_M$		
Diam. Zweikugelmaß Measurement o. balls	max. $M_{2k}$		
Diam. Zweikugelmaß Measurement o. balls	min. $M_{2k}$		
Verdrehfankenspiel Circumferential backlash	theo. $0.067$		
	0.162		

Vorbereitungsdaten siehe Verzahnungsblatt Vorbearbeitung gleicher Nr.  
 For pre-machining dimensions, see gear data sheet same number

Wkz-Profil siehe Werkzeugdatenblatt Nr. 250.1.3876.35  
 For Tooth profile, see tool data sheet number



$f_{Hk} = 0.000 \pm 0.006$   
 Average values  
 \* Schreibbeginn  $\varnothing = 90.30 - 0.30 \approx 11.08$   
 \* Start of checking



$f_{Hk} = 0.000 \pm 0.006$   
 Average values  
 \* Schreibbeginn  $\varnothing = 90.30 - 0.30 \approx 11.08$   
 \* Start of checking  
 \*  $f_{Hk}$  (zwischen dNF und dem Schreibbeginn ds) max  $f_{Hk}/2$ , jedoch 0.003 zulässig  
 \*  $f_{Hk}$  (between dNF and start of checking ds) max  $f_{Hk}/2$ , 0.003 allowable.  
 Profil- und Flankenlinienprüfung nach VDI/VDE 2612  
 Tabellenwerte für  $F_p$  und  $f_{Hk}$  sind auf die gesamte Radbreite im Meßkreis  $d_M$  bezogen  
 Flankenlinienprüfbereich  $L_p = 0.8 \cdot b$  hochgerechnet auf  $1.0 \cdot b$   
 Begriffe für Stirnrad nach DIN 868, 3960, 3998  
 Profile and helix checking according to VDI/VDE 2612  
 Listed tolerance data for  $F_p$  and  $f_{Hk}$  refers to the total face width in the meas. dia.  $d_M$   
 Tooth trace testing area  $L_p = 0.8 \cdot b$  calculated to  $1.0 \cdot b$   
 Terms of the tooth system according to DIN (German Industrial Standards) No. 868, 3960, 3998

außenverzahnt external		Toleranzen der Verzahnung (DIN 3961 vom Aug. 1978) valid for values at individual tooth	
Zähnezahl Number of teeth	z	linke Fl. left flank	rechte Fl. right flank
Modul Normal module	$m_n$	# 0.004	0.014
Eingriffswinkel Normal pressure angle	$\alpha_n$		0.014
Schrägungswinkel Helix angle	$\beta$		0.018
Stellungsrichtung Hand of helix	LEFT		
Profilverschleissfaktor Addendum modification coeff.	x	0.000 $\pm 0.007$	0.000 $\pm 0.007$
Teilkreisdurchmesser Pitch diameter	d	+ 0.010 $\pm 0.013$	- 0.015 $\pm 0.013$
Kopfkreisdurchmesser Outside diameter	$d_a$		
Kopfnutkreisd. theo. max. $d_{ka}$ Tip diam. usable theo.		# 0.004	0.040
Kopfnutkreisd. theo. min. $d_{ka}$ Tip diam. usable theo.			0.016
Fußkreisdurchmesser Root diameter	$d_f$		17.32
Fußnutkreisdurchmesser Root diameter usable	$d_{fr}$		
Grundkreisradius Base circle radius	$r_b$		
Grundkreisdurchmesser Base diameter	$d_b$		
Normalzahnstärke Normal tooth thickness	max. $s_n$		
Normalzahnstärke Normal tooth thickness	min. $s_n$		
Meßzahnanzahl Number of teeth spanned	k		
Zahnweite Base tangent length	max. $W_k$		
Zahnweite Base tangent length	min. $W_k$		
Meßkugeldurchmesser Ball diameter	$D_M$		
Diam. Zweikugelmaß Measurement o. balls	max. $M_{2k}$		
Diam. Zweikugelmaß Measurement o. balls	min. $M_{2k}$		
Verdrehfankenspiel Circumferential backlash	theo. $0.067$		
	0.162		











# Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0412 06 0	P26 B7590	Controllore: turno C	Data: 24.01.2017 11:41
Denominazione: SR4		Numero denti z: 47	Largh.fasc.dent. b: 16.55mm
Numero disegno.: 250.1.3876.35-IF		Modulo m: 1.8mm	Tratto evolv. La: 5.5mm
Commessa/serie nr.: 5		Angolo pressione: 17.5°	Tratto elica LE: 13.24mm
Masch.Nr.: M001	Spindel: FORM	Angolo elica: -24°	Inizio elab. M1: 12.81mm
Untersuchungszweck: Laufende Messung		Ø Base db: 87.5391mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Base: -22.825°	Fat.acor.pr. x: .638

RILASCIO	TIRO
Testa Ø: 99.26mm	[99.19/99.45]

VDI	

Drawing 3876 update from index "c" to "d"

Short description: 

d	1x	E007260_HIP_1	VIEW MAIN; Kopfkreis-Ø/TIP DIAMETER Ø99.45-0.26 war./WAS Ø99.45-0.16	20170110
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PPAP Requirements		Required	Note for ind. "d"
1	Design Records	Yes	
2	Authorized Engineering change documents	Yes	see dwg
3	Customer Engineering approval	n.a.	
4	DFMEA	NO	
5	Process flow diagram(s)	NO	
6	PFMEA	NO	only drawing correction with increased tolerance
7	Control plan	Yes	Correlation sheet change
8	Measurement system analysis studies	NO	
9	Dimensional results	Yes	
10	Records of Material / Performance test results	NO	
11	Initial process studies	NO	
12	Qualified laboratory documentation	NO	
13	Appearance Approval Report (A.A.R.)	n.a.	
14	Sample Production Parts	Yes	
15	Master sample	Yes	
16	Checking aids	n.a.	
17	Customer-Specific Requirements	NO	
18	Part Submission Warrant (PSW)	Yes	

PPAP Docs updated
Yes
Yes
Yes
Yes
Yes
Yes

Other requirements		
1	PSW Raw part	NO
2	PSW E.P. part	NO
3	PSW Engagement Rings	NO


Part Name <b>Speed Gear 4</b>		Customer Part Number <b>250.1.4223.37</b>	
Shown on Drawing No. <b>250.1.4223.37</b>		Organization Part # _____	
Engineering Change Level <b>c C007260_MIP_1</b>		Dated <b>10-gen-17</b>	
Additional Engineering Changes _____		Dated _____	
Safety and/or Government Regulation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Purchase Order No. _____	Weight (kg) <b>0.9150</b>	
Checking Aid No. _____	Checking Aid Engineering Change Level _____	Dated _____	

**ORGANIZATION MANUFACTURING INFORMATION**

**CUSTOMER SUBMITTAL INFORMATION**

**GETRAG MODUGNO**

Organization Name & Supplier/Vendor Code  
**VIA DEI CICLAMINI N°4**  
 Street Address  
**MODUGNO BARI 70026 ITALY**  
 City Region Postal Code Country

Customer Name/Division  
 Buyer/Buyer Code  
**DCT250**  
 Application

**MATERIALS REPORTING**

Has customer-required Substances of Concern information been reported?  Yes  No  n/a  
 Submitted by IMDS or other customer format: \_\_\_\_\_

Are polymeric parts identified with appropriate ISO marking codes?  Yes  No  n/a

**REASON FOR SUBMISSION (Check at least one)**

<input type="checkbox"/> Initial Submission	<input type="checkbox"/> Change to Optional Construction or Material
<input checked="" type="checkbox"/> Engineering Change(s)	<input type="checkbox"/> Supplier or Material Source Change
<input type="checkbox"/> Tooling: Transfer, Replacement, Refurbishment, or additional	<input type="checkbox"/> Change in Part Processing
<input type="checkbox"/> Correction of Discrepancy	<input type="checkbox"/> Parts Produced at Additional Location
<input type="checkbox"/> Tooling Inactive > than 1 year	<input type="checkbox"/> Other - please specify below

**REQUESTED SUBMISSION LEVEL (Check one)**

Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.  
 Level 2 - Warrant with product samples and limited supporting data submitted to customer.  
 Level 3 - Warrant with product samples and complete supporting data submitted to customer.  
 Level 4 - Warrant and other requirements as defined by customer.  
 Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location.

**SUBMISSION RESULTS**

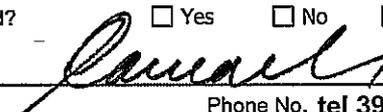
The results for  dimensional measurements  material and functional tests  appearance criteria  statistical process package  
 These results meet all drawing and specification requirements:  Yes  NO (If "NO" - Explanation Required)  
 Mold / Cavity / Production Process \_\_\_\_\_

**DECLARATION**

I hereby affirm that the samples represented by this warrant are representative of our parts which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of 2000 / 24 hours. I also certify that documented evidence of such compliance is on file and available for review. I have noted any deviations from this declaration below.

EXPLANATION / COMMENTS: **Drawing correction with standard Tip diameter tolerance used for topping machining (increased)**

Is each Customer Tool properly tagged and numbered?  Yes  No  n/a

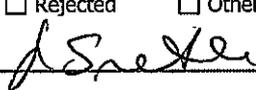
Organization Authorized Signature  Date **24/01/2017**

Print Name **Camarda Ettore** Phone No. **tel 390805858220** Fax No. \_\_\_\_\_

Title **Area 1 Manager** E-mail **ettore.camarda@magna.com**

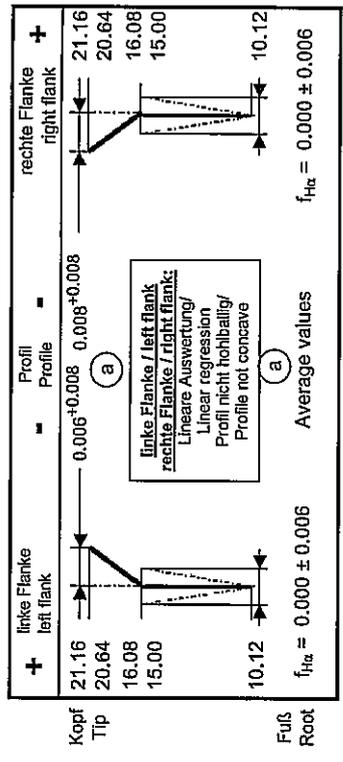
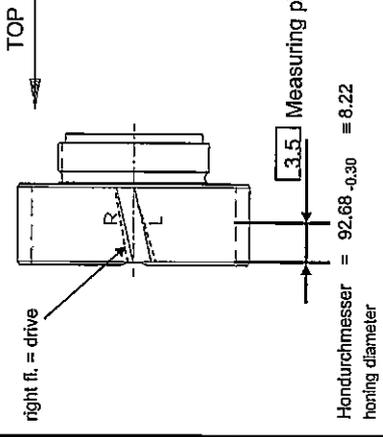
**FOR CUSTOMER USE ONLY (IF APPLICABLE)**

Part Warrant Disposition:  Approved  Rejected  Other

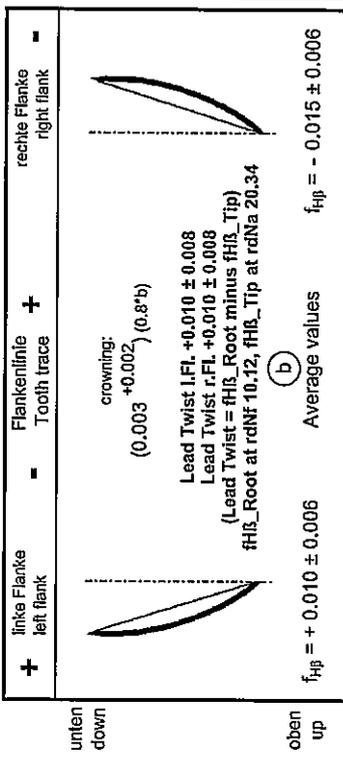
Customer Signature  Date **24.01.17**

Print Name \_\_\_\_\_ Customer Tracking Number (optional) \_\_\_\_\_

STIRNRAD GEAR		Toleranzen der Verzahnung, DIN 3961 vom Aug. 1978 gültig für Werte am Einzelzahn Tolerances of gearing (DIN 3961 of Aug. 1978) valid for values at individual tooth	
außenverzahnt external		linke Fl. left flank	rechte Fl. right flank
Zähnezahl Number of teeth	53	0.009	0.009
Modul Normal module	1.600000		
Eingriffswinkel Normal pressure angle	17° 30' 0"		
Schrägungswinkel Helix angle	29° 0' 0"		
Steigungsrichtung Hand of helix	LEFT		
Profilverschiebungsfaktor Addendum modification coeff.	x	0.000 ± 0.007	0.000 ± 0.007
Teilkreisdurchmesser Pitch diameter	d	+ 0.010 ± 0.013	- 0.015 ± 0.013
Kopfkreisdurchmesser Outside diameter	d <sub>a</sub>	0.016	0.016
Kopfnutkreis, theo. max. d <sub>ha</sub> Tip diam. usable theo.	d <sub>ha</sub>	0.009	0.050
Kopfnutkreis, theo. min. d <sub>ha</sub> Tip diam. usable theo.	d <sub>ha</sub>		
Fußkreisdurchmesser Root diameter	d <sub>f</sub>		16.55
Fußnutkreisdurchmesser Root diameter usable	d <sub>fr</sub>		
Grundkreisradius Base circle radius	r <sub>b</sub>		
Grundkreisdurchmesser Base diameter	d <sub>b</sub>		
Normalzahnstärke Normal tooth thickness	s <sub>n</sub>		
Normalzahnstärke Normal tooth thickness	s <sub>n</sub>		
Messzahnzahl Number of teeth spanned	k		
Zahnweite Base tangent length	W <sub>k</sub>		
Zahnweite Base tangent length	W <sub>k</sub>		
Messkugeldurchmesser Ball diameter	D <sub>k</sub>		
Diam. Zweikugelmaß max. M <sub>2k</sub> Measurement o. balls	M <sub>2k</sub>		
Diam. Zweikugelmaß min. M <sub>2k</sub> Measurement o. balls	M <sub>2k</sub>		
Verdreiflankenspiel Circumferential backlash	theo. 0.071 0.176		
		Einflanken-Wälzabweichung F <sub>r</sub>	Zweiflanken-Wälzabweichung F <sub>r</sub>
		Einflanken-Wälzabweichung f <sub>r</sub>	Zweiflanken-Wälzabweichung f <sub>r</sub>
		Tang. tooth to tooth comp. err. Radbreite im Meßkreis d <sub>M</sub> b	Radial tooth to tooth comp. err. Meßkreis-Krümmungsradius R <sub>Mk</sub>
		Teilungswinkelabweichung f <sub>α</sub>	Normal pitch error f <sub>po</sub>
		Flanken-Winkelabweichung f <sub>αt</sub>	Teilungssprung f <sub>p</sub>
		Flanken-Gesamtabweichung F <sub>β</sub>	Diff. bet. adjacent pitches f <sub>u</sub>
		Flanken-Formabweichung f <sub>β</sub>	Teilungssummenabweichung F <sub>pk</sub>
		Flanken-Gesamtabweichung F <sub>β</sub>	Cumulative circ. pitch error F <sub>r</sub>
		Flanken-Formabweichung f <sub>β</sub>	Rundlaufabweichung R <sub>s</sub>
		Flanken-Gesamtabweichung F <sub>β</sub>	Zahndickenschwankung R <sub>s</sub>
		Flanken-Gesamtabweichung F <sub>β</sub>	Range of tooth thicken. error
		Flanken-Gesamtabweichung F <sub>β</sub>	Zweifl.-Wälzabweichung F <sub>r</sub>
		Flanken-Gesamtabweichung F <sub>β</sub>	Radial composite error
		Flanken-Gesamtabweichung F <sub>β</sub>	Zweifl.-Wälzabweichung f <sub>r</sub>
		Flanken-Gesamtabweichung F <sub>β</sub>	Radial tooth to tooth comp. err.
		Flanken-Gesamtabweichung F <sub>β</sub>	Meßkreis-Krümmungsradius R <sub>Mk</sub>
		Flanken-Gesamtabweichung F <sub>β</sub>	Radius of curvature meas. diam.



\* Schreibbeginn Ø = 92.68 -0.30 ≅ 8.22



\* f<sub>ro2</sub> (zwischen d<sub>Nf</sub> und dem Schreibbeginn d<sub>s</sub>) max f<sub>ro2</sub>/2, jedoch 0.003 zulässig  
 \* f<sub>ro2</sub> (between d<sub>Nf</sub> and start of checking d<sub>s</sub>) max f<sub>ro2</sub>/2, 0.003 allowable.

Profil- und Flankenlinienprüfung nach VDI/VDE 2612  
 Tabellenwerte für F<sub>β</sub> und f<sub>β</sub> sind auf die gesamte Radbreite im Meßkreis d<sub>M</sub> bezogen  
 Flankenprüfbereich L<sub>β</sub> = 0.8\*b hochgerechnet auf 1.0\*b  
 Begriffe für Stirnräder nach DIN 868, 3960, 3998

Profile and helix checking according to VDI/VDE 2612  
 Listed tolerance data for F<sub>β</sub> and f<sub>β</sub> refers to the total face width in the meas. dia. d<sub>M</sub>  
 Tooth trace testing area L<sub>β</sub> = 0.8\*b calculated to 1.0\*b  
 Terms of the tooth system according to DIN (German Industrial Standards) No. 868, 3960, 3998

Verteller:		Schutzvermerk nach DIN 34 beachten	
c	1	20171717	Cricenti
b	1	20150515	Cricenti
a	2	20052011	Cricenti
Buch.	Anz.	Datum	Name
Abbildungen sind unmaßstäblich. Diagrams not to scale.		Ersatz für Erstverwendung bei Getriebe type 250.0.0004.16	
Datum	Name	Verzahnungsblatt Endkontrolle	
gez. 2009-11-18	Paafßen, Holger	Final Check Gear Data	
gepr.		Bestätigung Nichtigkeit	
Schalträd 4 Gg.		Zeichnungsnummer Drawing number	
		250.1.4223.37	

Vorbereitungsdaten: siehe Verzahnungsblatt Vorbearbeitung gleicher Nr.  
 For pre-machining dimensions, see gear data sheet same number

W/kz-Profil siehe Werkzeugdatenblatt Nr.  
 For Tooth profile, see tool data sheet number

250.1.4223.37



# Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0412_06 0	P26 B7590	Controllore: turno C	Data: 24.01.2017 08:10
Denominazione: SR4		Numero denti z: 53	Largh.fasc.dent. b: 16.55mm
Numero disegno.: 250.1.4223.37-IF		Modulo m: 1.6mm	Tratto evolv. La: 4.88mm
Commessa/serie nr.: 1		Angolo pressione: 17.5°	Tratto elica LE: 13.24mm
Masch.Nr.: M001	Spindel: Formale	Angolo elica: -29°	Inizio elab. M1: 10.12mm
Untersuchungszweck: Laufende Messung		Ø Base db: 91.2106mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Base: -27.54°	Fat.scor.pr. x: -.226

RILASCIO	TIRO
Testa-Ø: 100.886mm	[100.74/101]

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# Ruota cilindrica Evolvente/Elica



Nr. prog.: STI0412 06 0	P26 B7590	Controllore: turno C	Data: 24.01.2017 08:11
Denominazione: SR4		Numero denti z: 53	Largh.fasc.dent. b: 16.55mm
Numero disegno.: 250.1.4223.37-IF		Modulo m: 1.6mm	Tratto evolv. La: 4.88mm
Comessa/serie nr.: 2		Angolo pressione: 17.5°	Tratto elica LE: 13.24mm
Masch.Nr.: M001	Spindel: Forme	Angolo elica: -29°	Inizio elab. M1: 10.12mm
Untersuchungszweck: Laufende Messung		Ø Base db: 91.2106mm	Palpatore Ø (#2C) 1mm
Werkzeug:	Charge:	Ang. Base: -27.54°	Fat.acor.pr. x: -.226

RILASCIO	TIRO
Testa-Ø: 100.89mm	[100.74/101]

VDI	







Drawing 4223 update from index "b" to "c"

Short description: 

c	1x	007260_HIP..1	VIEW MAIN; Kopfkreis-Ø/TIP DIAMETER Ø101-0.26 war/WAS Ø101-0.2	20170110
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PPAP Requirements		Required	Note for ind. "d"
1	Design Records	Yes	
2	Authorized Engineering change documents	Yes	see dwg
3	Customer Engineering approval	n.a.	
4	DFMEA	NO	
5	Process flow diagram(s)	NO	
6	PFMEA	NO	only drawing correction with increased tolerance
7	Control plan	Yes	Correlation sheet change
8	Measurement system analysis studies	NO	
9	Dimensional results	Yes	
10	Records of Material / Performance test results	NO	
11	Initial process studies	NO	
12	Qualified laboratory documentation	NO	
13	Appearance Approval Report (A.A.R.)	n.a.	
14	Sample Production Parts	Yes	
15	Master sample	Yes	
16	Checking aids	n.a.	
17	Customer-Specific Requirements	NO	
18	Part Submission Warrant (PSW)	Yes	

PPAP Docs updated
Yes
Yes
Yes
Yes
Yes
Yes

Other requirements			
1	PSW Raw part	NO	
2	PSW E.P. part	NO	
3	PSW Engagement Rings	NO	

